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<th>Title or Topics (Unit organizing idea)</th>
<th>Concepts (understandings)</th>
<th>Skills (What students actually do)</th>
<th>Major Assessments (Tests, projects, etc.)</th>
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| Intro to Classic Hand Drawing and Design | NYSED Standard 1 - Engineering Design  
NYSED Standard 2 - Tech Tools and Resources | Learn and demonstrate proper design etiquette  
Practice precise drawing techniques  
Use various drawing tools (compass, protractor, T-Square)  
Design Title Blocks  
Design basic drawings | SLO 1 Assessment  
SLO 2 Assessment  
AutoCAD  
Terminology Quizzes | 2-3 Weeks |
| Intro To AutoCAD | NYSED Standard 1 - Engineering Design  
NYSED Standard 3 - Computer Technology  
NYSED Standard 4 - Technological Systems | Use AutoCAD and create accounts to access free program access  
Study AutoCAD and its uses in the production and manufacturing world  
Learn the various Autodesk programs and their potential uses  
Begin creating basic files using AutoCAD 2013 | AutoCAD Command and Tools Test  
AutoCAD  
Terminology Quizzes | 4 Weeks |
| AutoCAD Basics | NYSED Standard 1 - Engineering Design  
NYSED Standard 3 - Computer Technology  
NYSED Standard 4 - Technological Systems | Learn basic commands  
Learn basic toolbar features  
Practice drawing techniques using line and geometry commands  
Replicate drawings provided with step by step instructions using the internet  
Begin creating unique designs with precise measurement and dimensions | AutoCAD Replicate Design Tests  
AutoCAD  
Terminology Quizzes | 6-8 Weeks |
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<td>AutoCAD 3D</td>
<td>NYSED Standard 1 - Engineering Design</td>
<td>Learn Basic 3D Concepts Use 3D Coordinates and Viewpoints Create multiple basic 3D designs (sofa, chair, etc) Create Surfaced Models Learn Solid Modeling Concepts Learn Chamfer, Fillet, Slicing, and Cylinder commands Use various geometry commands Learn Plotting and the final production of 3D designs</td>
<td>3D Model Design Tests AutoCAD Terminology Quizzes</td>
<td>6-8 Weeks</td>
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<tr>
<td>Model Building Construction</td>
<td>NYSED Standard 2 - Tech Tools and Resources</td>
<td>Create a Building using blueprints Use various tools to cut, measure, and assemble Create Wall Frames Construct and Assemble final building</td>
<td>Final Building Construction Assessment</td>
<td>6-8 Weeks</td>
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| Intro To TECH 2 (Inventor and Revit) | NYSED Standard 1 - Engineering Design | Learn basic AutoCAD Inventor controls and features  
- Pull Down Menus  
- Command Bar terminology  
- Mouse controls  
- Creating Files | REVIT Basic Features  
- Commands and navigation  
- Learning wall, component, and design features  
- Designing a small building | Basic TECH 2 Design Tests  
AutoCAD Terminology Quizzes | 4 Weeks |

Reviewed Fall, 2020